

Abstract of the Disclosure

A router comprises a plurality of VR ports for each user of a virtual private network service. Each VR port comprises a routing table for a corresponding virtual privatenetwork. A control channel terminating unit and a VPN configuration module set up an L2TP tunnel between VR ports belonging to the same virtual private network. A gateway protocol daemon exchanges routing information via the established L2TP tunnel, and generates/updates a routing table. An input packet is routed according to the routing table.